



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,818	04/24/2001	Jin Lu	US 010192	5953

24737 7590 11/29/2006

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

VAN HANDEL, MICHAEL P

ART UNIT PAPER NUMBER

2623

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/840,818

Applicant(s)

LU, JIN

Examiner

Michael Van Handel

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/11/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Appeal Brief

1. This action is responsive to an Appeal Brief filed 9/11/2006. Claims **1-27** are pending.

Response to Arguments

1. Applicant's arguments, filed 9/11/2006, with respect to the rejection(s) of claim(s) **1, 2, 13, and 14**, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.
2. Applicant's arguments filed 9/11/2006, with respect to the use of Hendricks et al. in the rejections of claims **3-5, 9-11, 12, 15-17, 21, 24, and 26** have been fully considered, but they are not persuasive.

Regarding claims **3-5, 9-11, 15-17, and 21**, the applicant argues that the use of Hendricks et al. to teach various features on a hardware upgrade as being usable in POD modules is an improper hindsight reconstruction. The examiner respectfully disagrees. The applicant specifically argues that Hendricks et al. fails to teach a POD module, because a POD module is a module, "which is removable from the host and provides security and user authentication. The POD module contains functionality that is associated with a proprietary conditional access system of a local cable provider ... To allow portability, encryption and security are separated from the host and are located in the POD module. When inserted into the host, the POD module decodes encrypted content from the cable provider." Applicant further states that "The point-of-deployment (POD) module will provide cable operators with a removable security device at the

Art Unit: 2623

customer's location that is tied to their particular service so that customers can buy a single set-top box or television (host device) from their local retailer and use it with any cable provider."

The examiner does not rely on Hendricks et al. to teach features described by the applicant. The examiner relies on Hylton et al. to teach such features. Hylton et al. discloses a plug in Transport Interface Module (TIM) 101 (col. 14, l. 24-27 & Fig. 5) that includes a decryption module 207 that controls access to digital broadcast services. The decryption module comprises a decryptor and an interface to a renewable security device 211, which may be a card reader for accepting a TV Pass Card (col. 19, l. 1-23). Thus, Hylton et al. teaches a point-of-deployment (POD) module as claimed. Hendricks et al. discloses hardware upgrades for attachment to the hardware upgrade port of a set top terminal for providing additional services to a subscriber (col. 15, l. 58-67; col. 16, l. 1-17; col. 22, l. 67; col. 23, l. 1-10; col. 27, l. 23-40; & Figs. 5b, 12a). Since Hylton et al. discloses a portable POD module, as claimed, and Hendricks et al. discloses the use of portable hardware upgrades for providing additional services to the subscriber, the examiner maintains that the combination of Hylton et al. and Hendricks et al. teaches the limitations of claims 9-12, 23-27, as claimed, and that it further be obvious to make such combinations in light of the motivations recited in the Office Action below.

Regarding claim 12, the applicant argues that the Level B hardware upgrade of Hendricks et al. does not relate to e-mail. The examiner respectfully disagrees. Specifically, the applicant argues that the Level B hardware upgrade of Hendricks et al. relates to database applications. Hendricks et al. discloses a Level B hardware upgrade that provides a user with access to online data base services for applications requiring two-way communications with outside services over a two-way modem (col. 27, l. 11-22 & Fig. 12a). The Level B hardware upgrade provides intra-

Art Unit: 2623

set top terminal interactive services, such as electronic mail (col. 22, l. 64-67; col. 23, l. 1-10; & Figs. 8, 18, 20a). Since Hendricks et al. discloses the use of applications on a Level B hardware upgrade that provide access to electronic mail services, and Hylton et al. discloses a portable POD module, as claimed, the examiner maintains that the combination of Hylton et al. and Hendricks et al. teaches the limitation that a “user POD application program further comprises an e-mail program,” as currently claimed and that it further be obvious to make such a combination in order to provide a user with more interactive services.

Claim Objections

1. Claim 12 is objected to because of the following informalities:

Referring to claim 12, the examiner notes that the phrase “said user POD application program” lacks antecedent basis. The examiner notes that claim 12 is dependent from claim 1, which fails to recite a “user POD application program.” The examiner recommends that the claim be amended to depend from claim 3 and addresses the claim in the Office Action below as though the recommended changes have been made.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2623

2. Claims 1, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hylton et al.

Referring to claims 1 and 13, Hylton et al. discloses a removable circuit apparatus 101 (Transport Interface Module TIM), for use in a digital cable set-top box 102 (Digital Entertainment Terminal DET) capable of being coupled to a television set 103 (Fig. 1), capable of being inserted into a point of deployment (POD) host interface associated with said digital cable set-top box (col. 14, l. 24-29), said removable circuit apparatus comprising:

- a point of deployment (POD) module interface 209 (TIM/DET Interface) capable of mating with said POD host interface (col. 14, l. 24-27; col. 19, l. 1-23; & Figs. 4, 5); and
- a RF transceiver coupled to said POD module interface capable of receiving an incoming baseband signal from said digital cable set-top box, upconverting said baseband signal to an outgoing RF signal, and wirelessly transmitting said outgoing RF signal to at least one wireless communication device 10 (Shared Processing System) proximate said digital cable set-top box and further capable of wirelessly receiving an incoming RF signal from said at least one wireless communication device 10, downconverting said incoming RF signal to an outgoing baseband signal, and transmitting said outgoing baseband signal to said digital cable set-top box (col. 9, l. 9-13, 45-67; col. 14, l. 2-25; col. 16, l. 54-67; col. 17, l. 1-6; col. 19, l. 24-67; & col. 20, l. 1-36).

Art Unit: 2623

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al. in view of Yukie et al.

Referring to claims 2 and 14, Hylton et al. discloses the removable circuit apparatus as set forth in claims 1 and 13, respectively. Hylton et al. does not disclose that the incoming baseband signal and the incoming RF signal comprise Internet Protocol (IP) data packets. Yukie et al. discloses a video display 10 that communicates with base station 14 over a wireless connection 18 through a transceiver for bi-directional communications (col. 3, l. 32-44, 56-62; col. 8, l. 27-42 & Fig. 1). Yukie et al. further discloses that the transceiver be a removable device, such as a PCMCIA card wireless modem (col. 4, l. 64-67 & col. 5, l. 1). Yukie et al. still further discloses that the data generated by video display 10 will be in Internet Protocol (IP) format (col. 5, l. 66-67) and that the wireless connection between the video display 10 and base station 14 is through a wireless (IP) network (col. 5, l. 14-21 & col. 6, l. 6-10). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Hylton et al. to include generating IP packets and sending and receiving the IP packets over a wireless network, such as that taught by Yukie et al. in order to efficiently send data over a variety of wireless networks.

Art Unit: 2623

3. Claims 3-8, 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al. in view of Yukie et al. and further in view of Laubach et al.

Referring to claims 3 and 15, the combination of Hylton et al. and Yukie et al. teaches the removable circuit apparatus as set forth in claims 2 and 14, respectively, further comprising a data processor coupled to said POD module interface and capable of transmitting to said digital cable set-top box at least one of an audio signal and a video signal capable of being displayed on a screen of said television (Hylton et al. col. 18, l. 59-67; col. 20, l. 16-35; & Fig. 5). The combination of Hylton et al. and Yukie et al. does not specifically teach a memory coupled to said data processor capable of storing a user POD application program executable by said data processor, where in said user POD application program is operable to cause said data processor to control operation of said RF transceiver. Laubach et al. discloses a subscriber terminal unit containing one or more slots through which an application interface module (AIM) can be inserted and electrically coupled (col. 2, l. 57-63; col. 9, l. 22-34, 49-58; & Fig. 6). Telephony module 1101, Firewire and Universal Serial Bus (USB) module 1301, and ATM module 1401 each contain a microprocessor 1002, which executes operating system software (col. 13, l. 13-15 & Figs. 11, 13, 14). Each of the modules also contains Read-Only Memory (ROM) 1004 that stores software for the microprocessor and Random Access Memory (RAM) for storing software downloads (col. 13, l. 13-60). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the plug in module of Hylton et al. in the combination of Hylton et al. and Yukie et al. to include memory storing software instructions for controlling a modem, such as that taught by Laubach et al. in order to provide a user with a system that can flexibly accommodate different services (Laubach et al. col. 2, l. 11-53).

Referring to claims 4 and 16, the combination of Hylton et al., Yukie et al., and Laubach et al. teaches the removable circuit apparatus as set forth in claims 3 and 15, respectively, wherein said data processor is capable of receiving user input signals from said digital cable set-top box (Hylton et al. col. 19, l. 24-50).

Referring to claims 5 and 17, the combination of Hylton et al., Yukie et al., and Laubach et al. teaches the removable circuit apparatus as set forth in claims 4 and 16, respectively, wherein said user input signals comprise infrared signals detected by an infrared sensor 145 associated with said digital cable set-top box (Hylton et al. col. 19, l. 35-41 & Figs. 4, 5).

Referring to claims 6-8 and 18-20, the combination of Hylton et al., Yukie et al., and Laubach et al. teaches the removable circuit apparatus as set forth in claims 3 and 15. The combination of Hylton et al., Yukie et al., and Laubach et al. does not teach that the removable circuit apparatus further comprise a user interface coupled to said data processor capable of receiving user inputs from a keyboard or mouse coupled to said user interface. Laubach et al. discloses an advanced home interface module 1301 providing enhanced network interfaces over Firewire and USB (col. 15, l. 47-57 & Fig. 13). Laubach et al. further discloses that a mouse or keyboard can interface with the STU via the advanced home interface module 1301 (col. 15, l. 57-59). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the plug in module of Hylton et al. in the combination of Hylton et al., Yukie et al., and Laubach et al. to include an enhanced network interface for supporting a keyboard and a mouse, such as that taught by Laubach et al. in order to provide a user with a system that can flexibly accommodate different network standards (Laubach et al. col. 2, l. 11-53).

4. Claims **9-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al. in view of Yukie et al., further in view of Laubach et al., and still further in view of Hendricks et al.

Referring to claims **9-11**, the combination of Hylton et al., Yukie et al., and Laubach et al. teaches the removable circuit apparatus as set forth in claim 3. The combination of Hylton et al., Yukie et al., and Laubach et al. does not teach that the removable circuit apparatus further comprise a disk storage device capable of storing a user POD video game program and at least one of audio files, video files, graphics files, and text files associated with said user POD application program. Hendricks et al. discloses a set top terminal 220 that includes a hardware upgrade port 662 for attaching a Level C hardware upgrade (col. 15, l. 58-67; col. 16, l. 1-17; & Fig. 5b). The Level C upgrade includes a CD-ROM storage device 122 for allowing the use of multimedia applications, such as computer games, etc. (col. 27, l. 23-40 & Fig. 12a). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the plug in module of Hylton et al. in the combination of Hylton et al., Yukie et al., and Laubach et al. to include a CD-ROM storage device for allowing the use of multimedia applications, such as computer games, such as that taught by Hendricks et al. in order to provide a user with more interactive services.

NOTE: The USPTO considers the applicant's "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

Referring to claim **12**, the combination of Hylton et al., Yukie et al., and Laubach et al. teaches the removable circuit apparatus as set forth in claim 3 (see claim objections above). The

Art Unit: 2623

combination of Hylton et al., Yukie et al., and Laubach et al. does not teach that the user POD application program further comprises an e-mail program. Hendricks et al. discloses a set top terminal 220 that includes a hardware upgrade port 662 for attaching a Level B hardware upgrade (col. 15, l. 58-67; col. 16, l. 1-17; col. 27, l. 11-22; & Figs. 5b, 12a). The Level B upgrade provides a user with message services, such as electronic mail (col. 22, l. 64-67 & col. 23, l. 1-10; & Figs. 8, 18, 20a). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the plug in module of Hylton et al. in the combination of Hylton et al. Yukie et al., and Laubach et al. to provide a user with electronic mail services, such as that taught by Hendricks et al. in order to provide a user with more interactive services.

5. Claim **21** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al. in view of Yukie et al. and further in view of Billmaier.

Referring to claim **21**, the combination of Hylton et al. and Yukie et al. teaches the removable circuit apparatus as set forth in claim 14. The combination of Hylton et al. and Yukie et al. does not teach that the IP data packets comprise at least one of AM radio baseband signals and FM radio baseband signals. Billmaier discloses sending a radio program to a set top box (STB) over the Internet (col. 2, l. 47-50 & col. 3, l. 33-39, 64-67). A user access a radio program by selecting it from a program database 902, KMNO 96.5 FM (Houston), for instance (col. 8, l. 26-57). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the combination of Hylton et al. and Yukie et al. to include IP

Art Unit: 2623

data packets including FM radio baseband signals, such as that taught by Billmaier in order to provide a user with more interactive services.

6. Claim **22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Laubach et al. in view of Hicks, III et al.

Referring to claim **22**, Laubach et al. discloses a method for changing the functionality of a consumer electronics device, the device comprising a user interface for allowing a user to experience content and a set top box, the set top box comprising a POD module for converting content from a network format to a local format and vice versa, the method comprising starting with the set top box coupled with a first POD module associated with a first functionality for the device; removing the first POD module; and replacing the first POD module with a second POD module associated with a second functionality for the device (the examiner notes that the subscriber terminal unit (STU) contains a slot through which an application interface module (AIM) can be coupled. The same slot can be used to accept one of several different AIM modules. Different versions of AIM modules are implemented to provide a variety of enhancements and functionalities. Since the configuration of the AIM module determines the cable services available to the subscriber, and further since the cable operator can authorize or inhibit these services, the examiner interprets the AIM module to be a POD, as claimed)(col. 2, l. 57-63; col. 9, l. 49-58; col. 11, l. 63-67; col. 12, l. 1-17; col. 12, l. 52-67; col. 13, l. 1-10; col. 14, l. 44-50; & Fig. 9). Laubach et al. also discloses that the AIM modules provide different network interfaces for the STU (Figs. 11, 13, 14). Laubach et al. does not disclose a wireless connection for a first POD module or a wireless connection for a second POD module. Hicks,

Art Unit: 2623

III et al. discloses a broadband multimedia gateway (BMG) that can receive multimedia content from a variety of broadcasts and can deliver the content to a wide range of information appliances (p. 2, paragraph 19). Hicks, III et al. further discloses that the primary broadband network can be supplemented and extended by the addition of plug-in modules for other wireless data networking technologies, such as HomeRF, IEEE 802.11, and Bluetooth (p. 2, paragraph 18 & Fig. 2). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the network interfaces in the AIM modules of Laubach et al. to include various wireless data networking interfaces, such as that taught by Hicks, III et al. in order to provide a more convenient in-home multimedia distribution network.

7. Claim **23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Laubach et al. in view of Hicks, III et al. and further in view of Hendricks et al.

Referring to claim **23**, the combination of Laubach et al. and Hicks, III et al. teaches the method of claim 22. The combination of Laubach et al. and Hicks, III et al. does not teach that one of the first and second functionalities is one of the group: television, e-mail, digital radio, and at least one video game; and the other of the first and second functionalities is a different one of the group. Hendricks et al. discloses a set top terminal 220 that includes a hardware upgrade port 662 for attaching various hardware upgrades (col. 15, l. 58-67; col. 16, l. 1-17; & Fig. 5b). The Level B upgrade provides a user with message services, such as electronic mail (col. 22, l. 67 & col. 23, l. 1-10). The Level C upgrade includes a CD-ROM storage device 122 for allowing the use of multimedia applications, such as computer games, etc. (col. 27, l. 23-40 & Fig. 12a). The Level D upgrade includes a digital radio tuner (col. 27, l. 41-65 & Fig. 12b). It

Art Unit: 2623

would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the AIM modules of Laubach et al. in the combination of Laubach et al. and Hicks, III et al. to include electronic mail, computer games, and digital radio tuners, such as that taught by Hendricks et al. in order to provide a user with more interactive services.

8. Claims **24-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al. in view of Hendricks et al.

Referring to claims **24** and **26**, Hylton et al. discloses the circuit of claims 1 and 13, respectively, wherein the removable circuit apparatus is adapted to enable a respective consumer electronics function for the television set (col. 8, l. 11-13, 19-21). Hylton et al. does not disclose that in changing between such apparatus, the function the television set presents to a user is changed. Hendricks et al. discloses a set top terminal 220 that includes a hardware upgrade port 662 for attaching various hardware upgrades that provide different consumer functions (col. 15, l. 58-67; col. 16, l. 1-17; & Fig. 5b). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Hylton et al. to include a plurality of attachable hardware upgrades featuring different consumer functions, such as that taught by Hendricks et al. in order to provide a user with more interactive services.

Referring to claims **25** and **27**, the combination of Hylton et al. and Hendricks et al. discloses the circuit of claims 24 and 26, respectively, wherein the removable circuit apparatus is adapted to act as a security device enabling or blocking a specific data service (Hylton et al. col. 19, l. 1-10).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Russ et al. discloses a master device that interactively distributes a television signal to a remote device for remote display.

Newlin et al. discloses a universal multimedia access apparatus, comprising a transceiver and a processor, that accesses multimedia applications through the use of an application-specific module interfaced thereto.

Niefer discloses an interface device between a semiconductor storage medium for multimedia contents and a television standard video port.

Cheng et al. discloses a method and apparatus for separating network-dependent from network-independent functions in set-top boxes.

Naiff discloses transmitting TV audio and video bi-directionally over a wireless link between a PC and a television.

Ollikainen et al. discloses a modular digital data communication cyberstation and cyberserver.

Kinemura discloses a cable modem having a wireless communication function.

Allen discloses an RF receiver card coupled to a set top box.

Wugofski et al. discloses a wireless device for displaying integrated computer and television user interfaces.

York discloses a plug-in A/V wireless transmitter for a PC that allows the transmission of audio and video to a television.

Art Unit: 2623

Ghori et al. discloses a digital wireless home computer system.

Miura et al. discloses master terminal with a wireless transceiver for transmitting cable television FM baseband signals.

Schultheiss discloses a UHF transceiver and IR sensor on a PC card for wirelessly transmitting cable television from a PC to a television.

Gee, Jr. discloses a system and method for adaptively interfacing different POD modules to a navigation device.

Allen discloses a communication signal adapter connected between a satellite receiver and a wireless LAN transceiver to enable wireless communication.

Tegler et al. discloses a set top box with a pluggable wireless GSM uplink.

Eames et al. discloses a wireless in-home video distribution system.

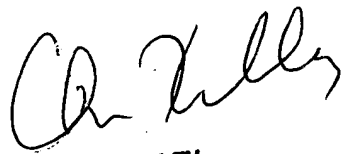
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Van Handel whose telephone number is 571-272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVH


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600